

CLAIMS

1. Interlocking coupling system (1) for overhead aligned rails (4,5) of which at least one rail (4) is displaceably arranged and comprises a first coupling part (2) and a second coupling part (3), each of said coupling parts (2,3) is arranged at end parts of said rails (4,5) and arranged for interlocking, when said rails (4,5) are in aligned position, **characterised in that** each of said coupling parts (2,3) comprises a pivotal gate member (23,33), and said first coupling part (23) comprises a locking bolt member (21) with a tapered end part (214) adapted to engage with a pin (334) projecting from said gate member (33) of said second coupling part (3) and said locking bolt member (21) is adapted to engage with a recess (234) in said pivotal gate member (23), and both said gate members (23, 33) are activated by displacing said locking bolt member (21).
2. Coupling system (1) according to claim 1, **characterised in that** said locking bolt member (21), at a distance behind said tapered end part (214), is provided with a projecting pin member (211) adapted to engage with said pivotal gate member (23) of said first coupling part (2).
3. Coupling system (1) according to claim 1, **characterised in that** each of said coupling parts (2, 3), furthermore, comprises a spring loaded key plate member (22, 31) with a number of ball bearings (224, 225, 313) adapted to engage with said key plate member (22, 31) on opposite coupling part (2, 3).
4. Coupling system (1) according to claims 1-3, **characterised in that** said first coupling part (2), said key plate member (22) and said gate member (23) are provided with elongated recesses (223, 234) for guiding said projecting pin member (211) of said locking bolt member (21).
5. Coupling system (1) according to claims 1-3, **characterised in that** said second coupling part (3) is provided with a locking arrangement for said key plate member (31) and said gate member (33).

6. Coupling system (1) according to claim 5, **characterised in that** said locking arrangement comprises a locking ball (32) adapted to move between a recess (312) in said key plate member (31) and said gate member (33).
- 5 7. Coupling system (1) according to claim 1, **characterised in that** each of said coupling parts (2, 3) is provided with an aligning member (203, 335) being adapted to engage with an aligning member (203, 335) of said opposite coupling part (2, 3).
- 10 8. Coupling system (1) according to claim 1, **characterised in that** said tapered end part (214) of said locking bolt member (21) is provided with an axially forwardly open recess (215) for receiving said pin (334) projecting from said gate member (33) of said second coupling part (3), and said open recess (215) having a transverse extension (216).
- 15 9. Coupling system (1) according to claim 1, **characterised in that** said first coupling part (2) comprises means for displacement of said bolt member (21).